

Supplementary Table 1 GRADE A) Re-intubation rate; B) Rate of escalation of respiratory support

A.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Reinbutation	Control	Relative (95% CI)	Absolute		
Reintubation-RCT												
6	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	8/373 (2.1%)	23/372 (6.2%)	RR 0.39 (0.17 to 0.87)	38 fewer per 1000 (from 8 fewer to 51 fewer)	⊕⊕⊕⊕ HIGH	CRITICAL
								5.7%		35 fewer per 1000 (from 7 fewer to 47 fewer)		
Case control studies												
2	observational studies	serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	10/89 (11.2%)	38/183 (20.8%)	OR 0.32 (0.15 to 0.71)	130 fewer per 1000 (from 51 fewer to 170 fewer)	⊕○○○ VERY LOW	CRITICAL
								28%		169 fewer per 1000 (from 64 fewer to 225 fewer)		
Reintubation- Cohort study												
1	observational studies	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	1/45 (2.2%)	7/45 (15.6%)	OR 0.12 (0.01 to 1.05)	134 fewer per 1000 (from 154 fewer to 7 more)	⊕⊕○○ LOW	CRITICAL
								15.6%		134 fewer per 1000 (from 154 fewer to 7 more)		

										more)		
--	--	--	--	--	--	--	--	--	--	-------	--	--

¹ High flow nasal cannula oxygen therapy or conventional oxygen therapy based on the individual attending's discretion

B.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Escalation of respiratory support	Control	Relative (95% CI)	Absolute		
Escalation of respiratory support-RCT												
7	randomised trials	no serious risk of bias	serious ¹	no serious indirectness	no serious imprecision	reporting bias ²	42/481 (8.7%)	78/484 (16.1%)	RR 0.54 (0.38 to 0.77)	74 fewer per 1000 (from 37 fewer to 100 fewer)	⊕⊕⊕ LOW	CRITICAL
								13.5%		62 fewer per 1000 (from 31 fewer to 84 fewer)		
Escalation of respiratory support-case control studies												
2	observational studies ³	serious ⁴	no serious inconsistency	no serious indirectness	no serious imprecision	none	10 cases 38 controls		OR 0.32 (0.15 to 0.71)	-	⊕⊕⊕ VERY LOW	CRITICAL
								38/183 (20.8%)		130 fewer per 1000 (from 51 fewer to 170 fewer)		
								28%		169 fewer per 1000 (from 64 fewer to 225 fewer)		
Escalation of respiratory support- Cohort studies												
1	observational studies	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	1/45 (2.2%)	7/45 (15.6%)	OR 0.12 (0.01 to	134 fewer per 1000 (from 154 fewer to 7	⊕⊕⊕ LOW	CRITICAL

									1.05)	more)		
								15.6%		134 fewer per 1000 (from 154 fewer to 7 more)		

¹ I²=64%, the heterogeneity was high

² Funnel plots suggest that there may be publication bias in Futier's research

³ case-control

⁴ High flow nasal cannula oxygen therapy or conventional oxygen therapy based on the individual attending's discretion